

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

Claims 1 to 8. (Canceled).

9. (Currently Amended) A process for producing one of (a) half-tubes and (b) a tube of a metallic, high-temperature-resistant material with a plurality of openings passing through a surface of the one of (a) the half-tubes and (b) the tube for fabricating heat-exchanger tubes for a recuperative waste gas heat exchanger, comprising:

forming a model, destroyable by heat, of each of the one of (a) the half-tubes and (b) the tube;

forming a mold shell by finishing with a conventional gate system and immersion of the model in a ceramic coating composition and sanding with a cast shell ceramic material, alternating in several cycles;

melting-out of the model from the mold shell;

hardening the mold shell by firing;

producing a melt from the metallic, high-temperature-resistant material;

casting the melt in the mold shell one of (a) by applying a vacuum and (b) under excess pressure of an inert gas;

removing, after solidification of the melt, the one of (a) the half-tubes and (b) the tube from the mold by destroying the mold shell;

cleaning and trimming the one of (a) the half-tubes and (b) the tube and removing a sprue; and

post-treating, as necessary, the opening openings passing through the surface of the one of (a) the half-tubes and (b) the tube by one of (a) spark erosion and (b) blasting with an abrasive blasting agent.

10. (Previously Presented) The process according to claim 9, wherein the model is melted out from the mold shell in the melting-out step in an autoclave.

11. (Previously Presented) The process according to claim 9, wherein the spark erosion includes electrodischarge machining.

12. (Previously Presented) The process according to claim 9, further comprising joining two half-tubes by one of (a) high-temperature soldering and (b) fusion welding to form a heat exchanger tube.

13. (Previously Presented) The process according to claim 9, wherein a material of the model includes wax.

14. (Previously Presented) The process according to claim 9, wherein the casting of the melt in the mold shell is performed in an absence of reactive gases.

15. (Previously Presented) The process according to claim 9, wherein the casting of the melt in the mold shell is performed one of (a) *in vacuo* and (b) under an inert gas atmosphere.

16. (Previously Presented) The process according to claim 9, wherein the casting of the melt in the mold shell includes pouring the melt into a hot mold shell.

17. (Previously Presented) The process according to claim 9, wherein the high-temperature-resistant material includes a nickel-based alloy.

18. (Previously Presented) The process according to claim 9, wherein the high-temperature-resistant material includes IN 625.

19. (Previously Presented) The process according to claim 9, wherein the openings are elliptical in shape.

20. (Previously Presented) The process according to claim 9, wherein a length of the one of (a) the half-tubes and (b) the tube is 500 mm, and a radius of the one of (a) the half-tubes and (b) the tube is 62.50 mm.

21. (Previously Presented) The process according to claim 9, wherein a length of the one of (a) the half-tubes and (b) the tube is 750 mm to 900 mm, and a radius of the one of (a) the half-tubes and (b) the tube is 37.50 mm.

Claims 22 to 25. (Canceled).

26. (New) A process for producing one of (a) half-tubes and (b) a tube of a metallic, high-temperature-resistant material with a plurality of openings passing through a surface of the one of (a) the half-tubes and (b) the tube for fabricating heat-exchanger tubes for a recuperative waste gas heat exchanger, comprising:

(a) forming a model, destroyable by heat, of each of the one of (a) the half-tubes and (b) the tube;

(b) after the step (a), forming a mold shell by finishing with a conventional gate system and immersion of the model in a ceramic coating composition and sanding with a cast shell ceramic material, alternating in several cycles;

(c) after the step (b), melting-out of the model from the mold shell;

(d) after the step (c), hardening the mold shell by firing;

(e) after the step (d), producing a melt from the metallic, high-temperature-resistant material;

(f) after the step (e), casting the melt in the mold shell one of (a) by applying a vacuum and (b) under excess pressure of an inert gas;

(g) after the step (f), removing, after solidification of the melt, the one of (a) the half-tubes and (b) the tube from the mold by destroying the mold shell;

(h) after the step (g), cleaning and trimming the one of (a) the half-tubes and (b) the tube and removing a sprue; and

(i) after the step (h), post-treating, as necessary, the openings passing through the surface of the one of (a) the half-tubes and (b) the tube by one of (a) spark erosion and (b) blasting with an abrasive blasting agent.